

SCR & SER Forest Health Update

Wisconsin DNR, Forest Health Protection Unit

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Japanese beetles feeding on birch



The Japanese beetle adult
Photo: David Cappaert,
www.forestryimages.org

Infestations by the Japanese beetle (*Popillia japonica*) on birch were observed in Columbia and Dane Counties. The beetles were feeding on birch leaves, causing skeletonizing or lacy appearance on leaves. A heavy defoliation by the beetle on lindens was also found in the Madison area. The Japanese beetle feeds on the leaves and flowers of over 300 plants. Preferred tree species include birch, Japanese and Norway maples, crab apples, lindens and mountain ash.

As the name implies, the beetle is native in Japan, and was first found in the US in New Jersey in 1916. It is believed that larvae of the Japanese beetle were accidentally introduced to the United States with a shipment of iris bulbs from Japan.

The Japanese beetle adult is about 3/8 inch long, and metallic green with copper-brown wing covers. There are six pairs of white tufts of hairs along the sides and back of the body. Adults are found from mid June to mid September. Population peak starts around mid-July and lasts for 4-6 weeks as individual beetles live about 30-45 days. The immature form of the Japanese beetle is a white grub and feeds on the roots. The Japanese beetle overwinters as a grub in the soil. The Japanese beetle has one generation per year.

If they are in low numbers, adults can be removed by hand picking. Trapping is usually not recommended as they may attract more beetles in your property. Insecticides, such as carbaryl, malathion, cyfluthrin, and permethrin, can be sprayed to control the adult beetles. Repeated applications may be necessary on a weekly basis when adult population is high. Always follow label directions.

For more information about the biology and management of the Japanese beetle, please visit the University of Wisconsin Extension at <http://wihort.uwex.edu/gardenfacts/X1062.pdf>.



Hail damage on white pine
Photo: Shane Lishawa

Hail damage and possible diplodia infection affecting red pine in Columbia County

- Shane Lishawa

A mid-June storm left a swath of hail damage through parts of



Whole crown injury in red pine stand
Photo: Shane Lishawa

Columbia County. Hail damage can be seen on the upper side of branches on red and white pine. The damage has caused browning of the crown of red pine (photo on the left). Although branches of white pine were also injured, the trees continued to look healthy with only some minor tip mortality. It is likely that the hail damage opened pathways for the fungal pathogen diplodia (*Diplodia pinea*) to enter the branches of red pine. Red pine is more susceptible to diplodia than white pine and likely explains the difference in damage between these two species. Samples are being

processed to confirm the presence of diplodia. Diplodia is a common pathogen of conifers and is present in non-damaging condition in many stands. The fungus capitalizes on tree stressors such as hail, insect damage, and drought to reach damaging levels.

Fall webworm making webs



Fall webworms (*Hyphantria cunea*) are busy making silken webs on a variety of trees throughout SCR. Webs are most commonly found on black walnut, but also on many other tree species, such as ash, cherry, hickory and oak. Newly emerged larvae spin a silken web enclosing terminal portions of branches and leaves, and feed on leaves inside the web. As the larvae feed, the web enlarges. Larvae are seen July through September. Although unsightly, feeding is usually concentrated in spots, and it does not adversely affect the overall health of a tree. In a yard situation, webbing can be pulled off the branches using a broom or

pruned out if it is on a small branch. Homeowners should not try to burn webs on a branch. No torches!

Jumping oak galls on oak leaves



Jumping oak galls on the underside of the leaves

Galls were seen on the leaves of bur and white oaks in Columbia, Dane, and Richland Cos. The jumping oak gall is caused by the gall wasp, *Neuroterus saltatorius*. Infestation on leaves causes discoloration on the leaf surface. Heavily infested leaves may prematurely fall. On the underside of the leaves, small pinhead-size round galls are seen on a saucer-like depression.

The jumping oak gall has two generations per year. The first generation wasps emerge from last year's galls in the spring. They are all female and lay eggs on newly expanding leaves. The eggs hatch into both male and female as a second generation. They mate, and females lay eggs on leaves. These galls fall to the ground when mature, and overwinter. Each gall contains one insect.

Sometimes heavy infestations are observed on some trees while neighboring trees are much less affected. It is believed that the difference in the level of infestation by the jumping oak gall has much to do with the timing of bud opening. Infestations by the jumping oak gall are not considered to cause any long-term negative effect on the health of the trees, and control is not necessary.

Exotic pests new detection reports ---

Another new Emerald Ash Borer find in Illinois - Renee Pinski

A third emerald ash borer infestation was detected in Illinois recently. Emerald ash borer infested trees were identified in Evanston (Cook County) on July 21, 2006. The infestation was discovered by a City of Evanston Parks / Forestry Division employee while assisting in an extensive survey initiated as a result of a previous emerald ash borer infestation in Wilmette, Illinois. Initial findings in the Evanston infestation found emerald ash borer in seven trees located within Lovelace Park, in the far northwest area of Evanston. In addition, an emerald ash borer infested tree was discovered on private property just outside the park. Detection surveys in both Wilmette and Evanston are ongoing, where at least 50 new trees have been identified as infested with emerald ash borer so far.

For more information about the emerald ash borer, please visit the Wisconsin DNR website at <http://dnr.wi.gov/org/land/Forestry/FH/Ash/index.htm>.

The Pathogen of Sudden Oak Death found in Indiana

The fungus-like micro-organism, *Phytophthora ramorum* was found in a Viburnum shrub shipped from Oregon to a hardware store in Indiana last month. *P. ramorum* is the pathogen of a fatal disease of oak, called sudden oak death (SOD). This finding emphasizes that nursery stocks are an important pathway to introduce this pathogen to a new area.

SOD has been found in coastal California and Oregon, killing many oak and tanoak trees. The causal agent of SOD was identified as a fungus-like pathogen *Phytophthora ramorum* in 2001. The pathogen infects not only oaks but a variety of plants, such as rhododendron and viburnum. This pathogen has not been found in Wisconsin.

For more information about sudden oak death, please visit the USDA Forest Service website at <http://www.na.fs.fed.us/sod>.

Gypsy moth update and forecast for 2006 - Mark Guthmiller

In SER, there was very little activity with some reports of caterpillars. At this time, no defoliation is expected in that part of the state for 2006. In SCR, the fungal disease, *Entomophaga*, caused a fair amount of caterpillar mortality. Unfortunately some areas experienced long enough periods of dry warm weather that larvae were able to survive. The highest populations are in Dane and Columbia County and it is expected that there will be pockets of nuisance level caterpillars and some isolated areas with possible defoliation especially in the Madison area.

Other pests reported

Elm sawflies - Larval feeding was reported on willow leaves in Lafayette County last week. For a brief description and photo see: <http://www.invasive.org/browse/detail.cfm?imgnum=1150126>

Please report to us

We appreciate reports of forest health problems in your areas. Currently, there is no regional forest health specialist assigned in SCR or SER. At this point, please contact the following staff for regional forest health problems/questions. Thank you.

For general forest health issues

Jane Cummings-Carlson (northern part of SER)	608-275-3273
Kyoko Scanlon (southern part of SER, and SCR)	608-275-3275
<u>For gypsy moth</u>	
Andrea Diss (Statewide issues)	608-264-9247
Mark Guthmiller (SCR/SER)	608-275-3223

Emerald ash borer hotline	1-800-462-2803
Gypsy moth hotline	1-800-642-MOTH

Forest Health web site: <http://www.dnr.state.wi.us/org/land/forestry/FH/>
Gypsy Moth web site: <http://www.gypsymoth.wi.gov>

About the newsletter

“SCR & SER Forest Health Update” is an informal newsletter created by the Wisconsin DNR, Forest Health Protection Unit. The purpose of this newsletter is to provide foresters in the South Central Region and Southeastern Region with regional up-to-date forest health information. This newsletter will be issued monthly during the growing season and on an irregular basis during winter as topics come up. We welcome your comments/suggestions on this newsletter and your reports on forest health problems you observed in your area. If you would like to subscribe to this newsletter, please contact Kyoko Scanlon at Kyoko.Scanlon@dnr.state.wi.us.

Previous issues of this update and regional forest health updates from NER and WCR are available from the WI DNR Forestry website at <http://dnr.wi.gov/org/land/Forestry/FH/intheNews/index.htm>.

Articles were written by Kyoko Scanlon, unless otherwise noted.